

## REMARKS

The Office Action mailed October 18, 2005, has been reviewed and carefully considered. Claims 9-25 have been amended. Claims 1-28 are pending in the application with claims 1-9 and 26 withdrawn.

Applicant thanks the Examiner for the indication that claims 9-24 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112, second paragraph.

In paragraph 4 on page 2 of the Office Action, the title was objected to as being non-descriptive.

Applicant respectfully traverses the objection to the title, but in the interest of expediting prosecution has replaced the title with a more descriptive title as suggested in the Office Action.

In paragraph 6 on page 2 of the Office Action, claims 9-26 were rejected under 35 U.S.C. § 112, second paragraph as being indefinite.

Applicant respectfully traverses the rejection, but in the interest of expediting prosecution has amended the claims to clarify the invention. Applicant respectfully submit that the amendments do not narrow the scope of the claims.

In paragraph 8 on page 3 of the Office Action, claims 25-26 were rejected under 35 U.S.C. § § 102(e) as being anticipated by Carey et al. (US PAP No. 2003/0206382).

Applicant respectfully traverses the rejection, but in the interest of expediting prosecution has amended the claims to overcome the rejection.

The independent claims require a self-pinned ferromagnetic bias layer that extends beyond the ends of the free layer.

In Fig. 2, Carey et al. shows a longitudinal bias stack that includes a ferromagnetic bias layer 220 and an antiferromagnetic bias layer 222. The ferromagnetic bias layer 220 and the

antiferromagnetic bias layer 222 exchange couple to each other, resulting in dominant edge magnetostatic coupling field that stabilize the magnetization of the free layer 212.

However, Carey et al. fails to show a self-pinned ferromagnetic bias layer that extends beyond the ends of the free layer.

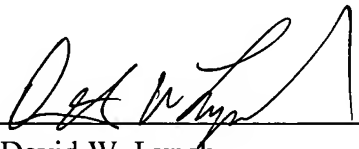
Accordingly, Applicant's invention, as recited in amended claims 9-26 are patentable over Carey et al.

On the basis of the above amendments and remarks, it is respectfully submitted that the claims are in immediate condition for allowance. Accordingly, reconsideration of this application and its allowance are requested.

If a telephone conference would be helpful in resolving any issues concerning this communication, please contact Attorney for Applicant, David W. Lynch, at 423-757-0264.

Respectfully submitted,

Chambliss, Bahner and Stophel  
1000 Tallan Building  
Two Union Square  
Chattanooga, TN 37402  
423-757-0264

By:   
Name: David W. Lynch  
Reg. No.: 36,204